

Taxation of Coal and Other Energy Resources

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Summary of Presentation

- **Today I'll present an overview of a new TRD Report, "*Taxation of Coal and Other Energy Resources*"**
- **You should all have a copy of the Report, and it is available on TRD's Website**
- **The Report was requested by Speaker Lujan and Representative Gardner during RSTP's meeting in Farmington last year**
- **Here are the topics I'll cover:**
 - **Coal Industry Basics**
 - **The Coal Industry in New Mexico**
 - **Coal Production, Prices, Revenues and Taxes Paid in New Mexico**
 - **Environmental Impacts from Natural Resource Production**
 - **Production and Non-Production Taxes on Coal, Oil and Natural Gas in New Mexico**
 - **Interstate Comparison of Taxes on Coal**
 - **The Structure of Taxes on Oil and Natural Gas in New Mexico**
 - **Interstate Comparison of Taxes on Oil and Natural Gas**

Coal Industry Basics

Types of Coal

- Lignite
 - Lowest rank of coal with lowest energy content
 - 25-35% carbon and 4,000-8,300 heat value in BTU/Lb.
 - Most is mined in Texas and North Dakota
- Subbituminous
 - 35-45% carbon and 8,300-13,000 heat value
 - Wyoming has the largest deposits, followed by Montana, then New Mexico
- Bituminous
 - 45-86% carbon and 10,500 to 15,500 heat value
 - Most abundant rank found in United States, about half of U.S. production
 - Important fuel and raw material for the steel and iron industries
 - West Virginia, Kentucky and Pennsylvania are the largest producers
 - New Mexico ranks 12th among the 19 states that produce bituminous coal
 - New Mexico ranks 2nd among the nine states that produce less than 10 million short tons of bituminous coal annually
- Anthracite
 - 86-97% carbon and over 15,000 heat value
 - Very little in the United States (less than .005 % of all coal mined)
 - All mines are in northeastern Pennsylvania

Coal Uses

- Electric Power
 - About 92% of coal used in the United States
 - Approximately 50% of all electricity is produced with coal
 - Electric utility companies; industries and businesses with own plants
- Industry
 - Variety of industries use coal's heat and by-products
 - Separated ingredients of coal (such as methanol and ethylene) are used in making plastics, tar, synthetic fibers, fertilizers and medicines
 - Concrete and paper industries also burn large amounts
- Steel
 - Coal is baked in hot furnaces to make coke
 - Coal is used to smelt iron ore into iron needed for making steel
- Exports
 - The United States exports metallurgical and steam coal and coke
 - U.S. coal exports in 2008 were 81.5 million short tons

Coal Production and Prices by State, Regions and Type of Coal or Mine

- The following table shows coal production by region and state from calendar years 2004-2008 and the percentage change from 2007 to 2008
- Wyoming and West Virginia are the two largest producing states, together accounting for over half of total U.S. production

U.S. Coal Production by Coal-Producing Region and State, 2004-2008 (million short tons)

Coal-Producing Region and State	2004	2005	2006	2007	2008	Percent Change
						2007 - 2008
Appalachia Total	389.9	396.7	391.2	377.8	389.8	3.2
Alabama	22.3	21.3	18.8	19.3	20.6	6.6
Kentucky, Eastern	90.9	93.3	93.6	87.1	89.9	3.2
Maryland	5.2	5.2	5.1	2.3	2.8	22.0
Ohio	23.2	24.7	22.7	22.6	26.3	16.3
Pennsylvania Total	66.0	67.5	66.0	65.0	65.3	0.4
Anthracite	1.7	1.6	1.5	1.6	1.7	8.7
Bituminous	64.3	65.8	64.5	63.5	63.6	0.2
Tennessee	2.9	3.2	2.8	2.7	2.3	-12.0
Virginia	31.4	27.7	29.7	25.3	24.6	-3.0
West Virginia Total	148.0	153.6	152.4	153.5	158.0	2.9
Northern	40.6	42.6	42.4	42.2	40.9	-3.1
Southern	107.3	111.0	110.0	111.3	117.1	5.2
Interior Total	146.0	149.2	151.4	146.7	146.7	0.0
Arkansas	*	*	*	0.1	0.1	-16.3
Illinois	31.9	32.0	32.7	32.4	33.0	1.6
Indiana	35.1	34.5	35.1	35.0	36.2	3.3
Kansas	0.1	0.2	0.4	0.4	0.2	-45.5
Kentucky, Western	23.4	26.4	27.2	28.2	30.0	6.3
Louisiana	3.8	4.2	4.1	3.1	3.8	22.9
Mississippi	3.6	3.6	3.8	3.5	2.8	-19.9
Missouri	0.6	0.6	0.4	0.2	0.2	4.6
Oklahoma	1.8	1.9	2.0	1.6	1.4	-17.7
Texas	45.9	45.9	45.5	41.9	39.0	-7.0
Western Total	575.2	585.0	619.4	621.0	633.6	2.0
Alaska	1.5	1.5	1.4	1.3	1.5	11.6
Arizona	12.7	12.1	8.2	8.0	8.0	0.5
Colorado	39.9	38.5	36.3	36.4	32.0	-12.0
Montana	40.0	40.4	41.8	43.4	44.8	3.2
New Mexico	27.2	28.5	25.9	24.5	25.6	4.9
North Dakota	29.9	30.0	30.4	29.6	29.6	0.1
Utah	21.7	24.5	26.0	24.3	24.4	0.2
Washington	5.7	5.3	2.6	-	-	0.0
Wyoming	396.5	404.3	446.7	453.6	467.6	3.1
Refuse Recovery	1.0	0.7	0.8	1.2	1.4	17.9
U.S. Total	1,112.1	1,131.5	1,162.7	1,146.6	1,171.5	2.2

* Less than 50 thousand short tons.

- The following table shows coal production and number of mines by state, region and type of coal in calendar year 2007
- About half of U.S. production is bituminous (West Virginia is the largest producer) and the most of the remainder subbituminous (primarily from Wyoming, with Montana the second largest producer and New Mexico the third largest)

Coal Production and Number of Mines by State, Region and Coal Rank, 2007
(production in thousands of short tons)

Coal Producing State and Region	Bituminous		Subbituminous		Lignite		Anthracite		Total	
	Number of Mines	Production	Number of Mines	Production	Number of Mines	Production	Number of Mines	Production	Number of Mines	Production
Alabama	49	19,327	-	-	-	-	-	-	49	19,327
Alaska	-	-	1	1,324	-	-	-	-	1	1,324
Arizona	1	7,983	-	-	-	-	-	-	1	7,983
Arkansas	2	83	-	-	-	-	-	-	2	83
Colorado	9	28,016	3	8,368	-	-	-	-	12	36,384
Illinois	21	32,445	-	-	-	-	-	-	21	32,445
Indiana	27	35,003	-	-	-	-	-	-	27	35,003
Kansas	2	420	-	-	-	-	-	-	2	420
Kentucky Total	417	115,280	-	-	-	-	-	-	417	115,280
Eastern	394	87,068	-	-	-	-	-	-	394	87,068
Western	23	28,212	-	-	-	-	-	-	23	28,212
Louisiana	-	-	-	-	2	3,127	-	-	2	3,127
Maryland	19	2,301	-	-	-	-	-	-	19	2,301
Mississippi	-	-	-	-	1	3,545	-	-	1	3,545
Missouri	2	236	-	-	-	-	-	-	2	236
Montana	-	-	5	43,031	1	358	-	-	6	43,390
New Mexico*	1	6,898	3	17,553	-	-	-	-	4	24,451
North Dakota	-	-	-	-	4	29,606	-	-	4	29,606
Ohio	57	22,575	-	-	-	-	-	-	57	22,575
Oklahoma	9	1,648	-	-	-	-	-	-	9	1,648
Pennsylvania Total	192	63,484	-	-	-	-	72	1,564	264	65,048
Anthracite	-	-	-	-	-	-	72	1,564	72	1,564
Bituminous	192	63,484	-	-	-	-	-	-	192	63,484
Tennessee	17	2,654	-	-	-	-	-	-	17	2,654
Texas	-	-	-	-	11	41,948	-	-	11	41,948
Utah	10	24,307	-	-	-	-	-	-	10	24,307
Virginia	118	25,346	-	-	-	-	-	-	118	25,346
West Virginia Total	282	153,480	-	-	-	-	-	-	282	153,480
Northern	43	42,219	-	-	-	-	-	-	43	42,219
Southern	239	111,260	-	-	-	-	-	-	239	111,260
Wyoming	1	120	19	453,448	-	-	-	-	20	453,568
Appalachian Total	1,128	376,236	-	-	-	-	72	1,564	1,200	377,800
Northern	311	130,580	-	-	-	-	72	1,564	383	132,144
Central	768	226,329	-	-	-	-	-	-	768	226,329
Southern	49	19,327	-	-	-	-	-	-	49	19,327
Interior Total	86	98,047	-	-	14	48,620	-	-	100	146,668
Illinois Basin	71	95,660	-	-	-	-	-	-	71	95,660
Western Total	23	67,323	30	523,724	5	29,965	-	-	58	621,012
Powder River Basin	-	-	17	479,496	-	-	-	-	17	479,496
Uinta Region	16	51,446	3	8,368	-	-	-	-	19	59,815
East of Miss. River	1,199	471,897	-	-	1	3,545	72	1,564	1,272	477,006
West of Miss. River	38	69,710	30	523,724	18	75,040	-	-	86	668,474
U.S. Subtotal	1,237	541,607	30	523,724	19	78,585	72	1,564	1,358	1,145,480
Refuse Recovery	15	1,151	-	-	-	-	1	4	16	1,156
U.S. Total	1,252	542,758	30	523,724	19	78,585	73	1,568	1,374	1,146,635

*One mine in New Mexico periodically produces both bituminous and subbituminous coal. When this occurs, it is double counted as a subbituminous and bituminous mine, but is not double counted in the total.

- = No data are reported.

- The following table shows the average open market sales price of coal by state and mine type (surface and underground) in calendar year 2007
- In most states the prices for underground and surface mined coal are similar, but the low price for surface mined coal in Wyoming makes the average for surfaced mined coal far below the average for underground

Average Open Market Sales Price of Coal by State and Mine Type, 2007

Coal-Producing State	2007		
	Underground	Surface	Total
Alabama	\$53.93	\$57.92	\$55.56
Alaska	-	W	W
Arizona	-	W	W
Arkansas	W	-	W
Colorado	W	W	\$24.91
Illinois	\$33.44	\$34.37	\$33.60
Indiana	\$33.84	\$26.79	\$28.79
Kansas	-	W	W
Kentucky Total	\$43.80	\$43.36	\$43.62
Eastern	\$49.80	\$44.67	\$47.27
Western	\$33.27	\$28.75	\$32.67
Louisiana	-	W	W
Maryland	W	W	\$33.02
Mississippi	-	W	W
Missouri	-	W	W
Montana	W	W	\$11.79
New Mexico	W	W	\$29.91
North Dakota	-	\$11.56	\$11.56
Ohio	\$28.32	\$30.17	\$28.79
Oklahoma	W	W	\$34.98
Pennsylvania Total	\$39.34	\$39.15	\$39.30
Anthracite	W	W	\$52.24
Bituminous	W	W	\$39.04
Tennessee	\$45.73	\$40.89	\$42.53
Texas	-	\$19.47	\$19.47
Utah	\$25.69	-	\$25.69
Virginia	\$53.91	\$51.45	\$52.89
West Virginia Total	\$48.44	\$46.65	\$47.63
Northern	\$37.77	\$37.05	\$37.67
Southern	\$56.86	\$47.53	\$51.50
Wyoming	-	\$9.67	\$9.67
U.S. Total	\$40.29	\$19.41	\$26.20

- = No data are reported.

W = Data withheld to avoid disclosure.

Note: Open market includes all coal sold on the open market to other coal companies or consumers. An average open market sales price is calculated by dividing the total free on board (f.o.b.) rail/barge value of the open market coal sold by the total open market coal sold. Data excludes mines producing less than 10,000 short tons, which are not required to provide data. Excludes silt, culm, refuse bank, slurry dam and dredge operations.

The Coal Industry in New Mexico

Industry Profile

- Presently, all coal is being produced in the San Juan Basin
- Overall coal quality is primarily determined by heat value and sulfur content
 - Higher sulfur content makes emissions produced when coal is burned dirtier
 - The national average percent of sulfur content is one to two percent, whereas New Mexico content is generally less than one percent
- Ash content is also an important determinant of overall quality
 - Ash becomes a byproduct that must be disposed of after coal combustion
 - Ash is also corrosive to the combustion chamber, requiring periodic removal for safe and efficient operations

Characteristics of New Mexico Coal (weighted averages for all categories)

Company and Mine	Coalbed Thickness	BTU/Lb.	Carbon %	Ash %	Sulfur %
BHP Navajo	18	8,714	47.68	19.26	0.71
BHP San Juan	16	10,375	57.31	16.94	0.87
Peabody El Segundo	15	9,441	52.56	13.35	1.08
Peabody Lee Ranch	14	9,895	56.37	13.05	0.94
Chevron McKinley	13	10,497	61.16	11.25	0.47

- BHP Navajo and BHP San Juan are owned by BHP Billiton Marketing, Inc.
- Peabody El Segundo and Peabody Lee Ranch are owned by Peabody Natural Resources
 - Peabody El Segundo commenced operations in June 2008
- Chevron operated two mines, McKinley North and McKinley South until 2007
 - The McKinley South mine was closed in 2007
 - The McKinley North mine is expected to close soon
- Peabody El Segundo and Peabody Lee Ranch have picked up some of Chevron's contracts
- The destination of coal from each mine is detailed in the full Report

Electric Profile

- The majority of New Mexico coal is used for electrical generation
- Approximately 69% of all New Mexico coal is sent to power stations in New Mexico, with the remaining 31% percent transported by rail to Arizona
- The following three tables show the ten largest plants by generation capacity; the top five retailers of electricity with end use sectors; and electric power industry generation by primary energy source

Ten Largest Plants by Generation Capacity in New Mexico, 2007

Plant	Primary Energy Source or Technology	Operating Company	Net Summer Capacity (MW)
1. Four Corners	Coal	Arizona Public Service Co	2,060
2. San Juan	Coal	Public Service Co of NM	1,643
3. Luna Energy Facility	Gas	Public Service Co of NM	559
4. Cunningham	Gas	Southwestern Public Service Co	485
5. Escalante	Coal	Tri-State G & T Assn, Inc	247
6. Rio Grande	Gas	El Paso Electric Co	236
7. Afton Generating Station	Gas	Public Service Co of NM	236
8. New Mexico Wind Energy Center	Other Renewables	FPL Energy New Mexico Wind LLC	204
9. Maddox	Gas	Southwestern Public Service Co	179
10. Pyramid	Gas	Tri-State G & T Assn, Inc	158

Top Five Retailers of Electricity in New Mexico, with End Use Sectors, 2007 (megawatthours)

Entity	Type of Provider	All Sectors	Residential	Commercial	Industrial	Transportation
1. Public Service Co of NM	Investor-Owned	9,371,704	3,210,651	4,240,967	1,920,086	-
2. Southwestern Public Service Co	Investor-Owned	4,106,037	979,448	1,448,641	1,677,948	-
3. El Paso Electric Co	Investor-Owned	1,593,747	592,148	898,561	103,038	-
4. City of Farmington	Public	1,243,706	254,659	446,629	542,418	-
5. Central Valley Elec Coop, Inc	Cooperative	719,746	58,747	89,849	571,150	-
Total Sales, Top Five Providers		17,034,940	5,095,653	7,124,647	4,814,640	-
Percent of Total State Sales		77	80	80	69	-

- (dash) = Data not available.

Electric Power Industry Generation by Primary Energy Source in New Mexico (megawatthours)

Energy Source	1997	2007	Percentage Share	
			1997	2007
Electric Utilities	30,568,142	34,033,374	97.2	94.6
Coal	27,078,660	27,603,647	86.1	76.7
Petroleum	21,075	42,969	0.1	0.1
Natural Gas	3,209,597	6,118,780	10.2	17.0
Hydroelectric	258,810	267,978	0.8	0.7
Independent Power Producers and Combined Heat and Power	894,215	1,951,959	2.8	5.4
Petroleum	1,923	1,502	*	*
Natural Gas	886,080	541,224	2.8	1.5
Other Renewables ¹	6,212	1,409,233	*	3.9
Total Electric Industry	31,462,357	35,985,333	100.0	100.0
Coal	27,078,660	27,603,647	86.1	76.7
Petroleum	22,998	44,471	0.1	0.1
Natural Gas	4,095,677	6,660,004	13.0	18.5
Hydroelectric	258,810	267,978	0.8	0.7
Other Renewables ¹	6,212	1,409,233	*	3.9

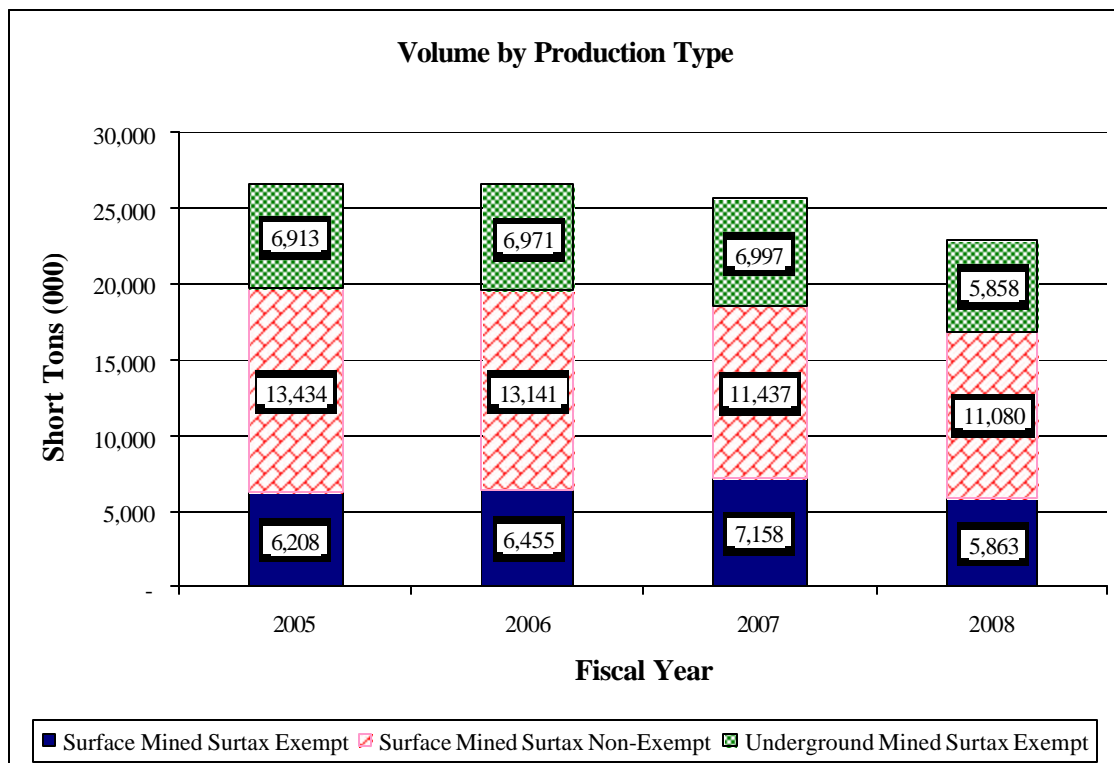
¹Other Renewables includes biogenic municipal solid waste, wood, black liquor, other wood waste, landfill gas, sludge

* = Value is less than half of the smallest unit of measure (e.g., for values with no decimals, the smallest unit is 1 and values under 0.5 are shown as *).

Coal Production, Prices, Revenues and Taxes Paid in New Mexico

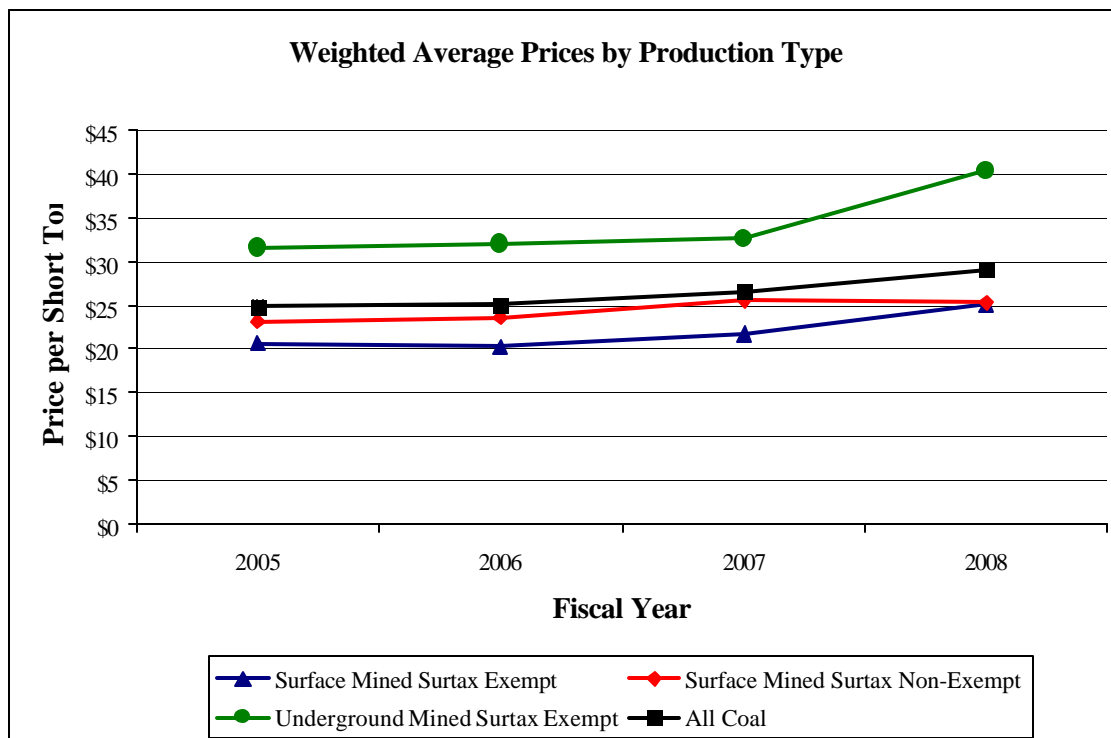
- The following graph reflects volume by production type in New Mexico from Fiscal Years 2005-2008
- Surface mined coal not exempt from the surtax continues to comprise the largest share of all coal production
- Although this graph reflects total declining production in Fiscal Years 2007 and 2008, data from the Energy Information Administration reflects a 4.9% increase in calendar year 2008

Volume by Production Type, FY2005-2008



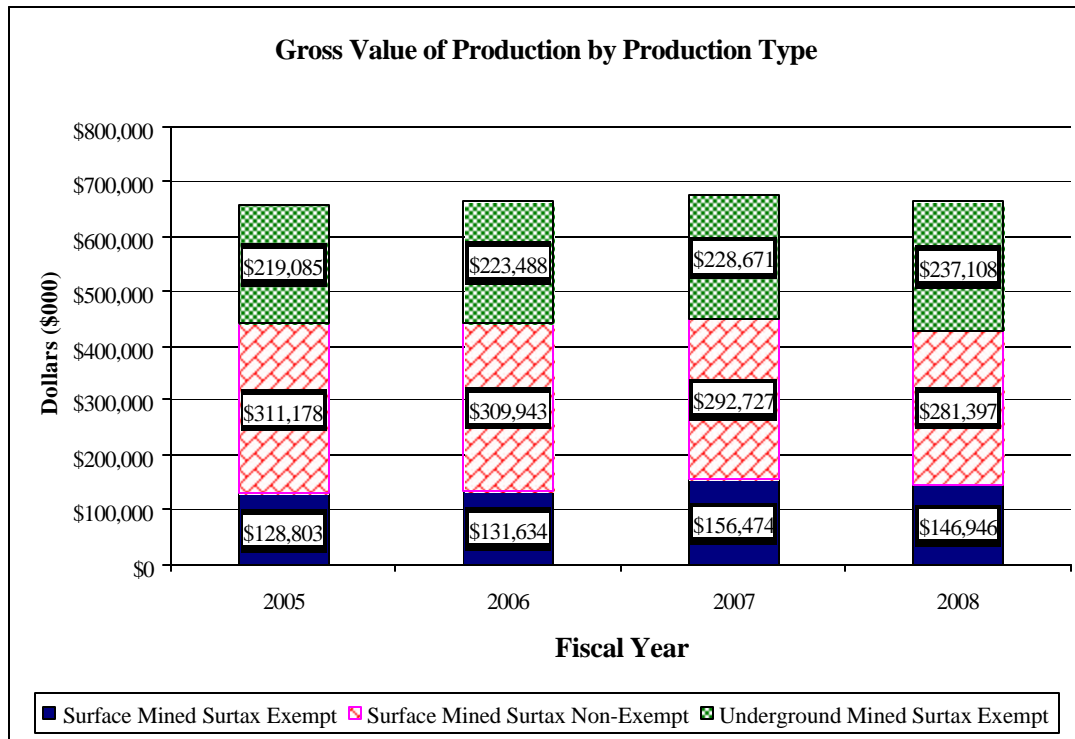
- The following graph shows weighted average prices by production type from Fiscal Years 2005-2008
- Underground mined coal has consistently sold for significantly higher prices
 - Prices for underground mined coal rose significantly in Fiscal Year 2008, reflecting the higher rank of coal mined underground
- Prices for surface mined coal exempt from the surtax also rose significantly from Fiscal Year 2007 to Fiscal Year 2008
 - Prices for surface mined coal not exempt from the surtax stayed relatively flat from Fiscal Year 2007 to Fiscal Year 2008

Weighted Average Prices by Production Type, FY2005-2008



- The following graph shows gross value of production by production type from Fiscal Years 2005-2008
- The revenue share of underground mined coal is larger than its share of volume, reflecting the higher prices received

Gross Value of Production by Production Type, FY2005-2008



Severance Tax

- The tax base is the quantity of coal severed and saved
- Taxes on coal in New Mexico are \$.57 per short ton for surface coal and \$.55 for underground coal
- All revenues are distributed to the Severance Tax Bonding Fund

Severance Tax Surtax

- The tax base is the same as for the severance tax
- All revenues are distributed to the Severance Tax Bonding Fund
- The surtax rate has varied since it was imposed in 1977
- From FY1990 through FY1993, the surtax was \$0.60 per short ton for surface coal and \$0.58 for underground coal

- Beginning in FY1994, the surtax rate was increased each fiscal year by multiplying the rate in effect in FY1993 by the percentage increase in the Producer Price Index from 1991 to the calendar year prior to the fiscal year
- Beginning in 1990, various exemptions have been provided to the coal surtax, with the following exemptions currently in effect:
 - Coal sold and delivered pursuant to genuinely new contracts entered into on or after July 1, 1990
 - Coal sold and delivered pursuant to contracts already in effect on July 1, 1990, that exceeds the annualized average calendar year deliveries under the contract during production years 1987, 1988 and 1989 unless the deliveries are reduced due to causes beyond the reasonable control of either party to the contract
 - If a contract existing on July 1, 1990, and renegotiated after May 20, 1992, requires the purchaser to take annual coal deliveries in excess of the greater of the average calendar year deliveries from 1987-1989 or the highest annual contract minimum from 1987-1989, the surtax does not apply to such excess deliveries for the remaining term of the renegotiated contract
- In FY2010 the severance surtax in effect is
 - \$1.02 per short ton for surface coal
 - \$0.99 per short ton for underground coal

Resources Excise Tax

- Actually three taxes in one
 - Resources Tax
 - Processors Tax
 - Service Tax
- Only the Resources Tax is presently in effect
- The tax base is:
 - The value after severing or processing (generally, the actually price received at the production unit times the quantity of production)
 - Less sales to federal, state or local governments or other tax exempt organizations (no such deductions taken FY2005-FY2008)
 - Less service charges on which the service tax has been paid
 - Less state, federal and Indian royalties (deductions in FY2008 averaged 8.88% of value)
- The tax rate of the Resources Tax is .75%
- All revenues are distributed to the General Fund

Conservation Tax

- The tax base is:
 - The value of production (generally, the actual price received at the production unit times the quantity of production)
 - Less sales to federal, state or local governments or other tax exempt organizations (no such deductions taken FY2005-FY2008)
 - Less state, federal and Indian royalties (deductions in FY2008 averaged 8.88% of value)
- The current tax rate is 0.19%
- 1/19th (or 5.26%) of total collections is distributed to the Oil and Gas Reclamation Fund
- The remaining 18/19ths (94.74%) of revenues is distributed to the General Fund

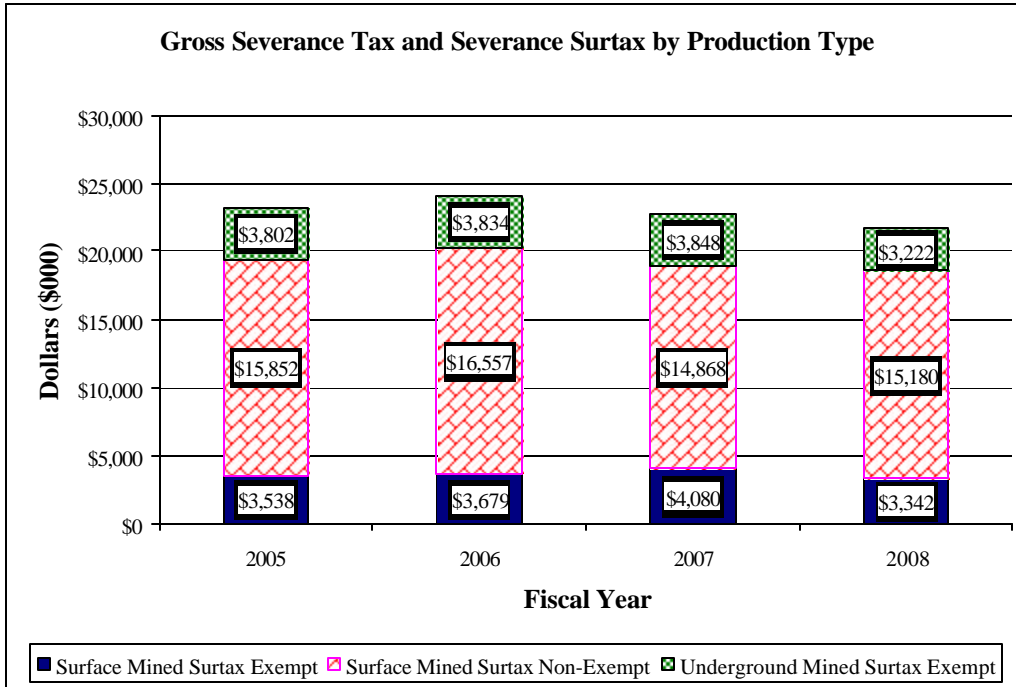
Coal Production, Prices, Revenues and Taxes Paid in New Mexico

- The following table summarizes coal production, prices, revenues and taxes paid in New Mexico by mine type from Fiscal Years 2005-2008
- Note that the effective combined severance tax and severance surtax rates for surface-mined coal reflect a mix of old and new contract sales, some of which are exempt from the severance surtax
- Weighted average prices have steadily increased for surface and underground mined surtax exempt coal but not for non-exempt surface coal
- Volumes and sales revenues spiked in Fiscal Year 2007
- All Intergovernmental Tax Credits are taken by companies that produce only surface coal
- The per unit tax and higher prices received for underground coal result in much lower effective tax rates for underground coal
- This is also reflected in the graph following the table

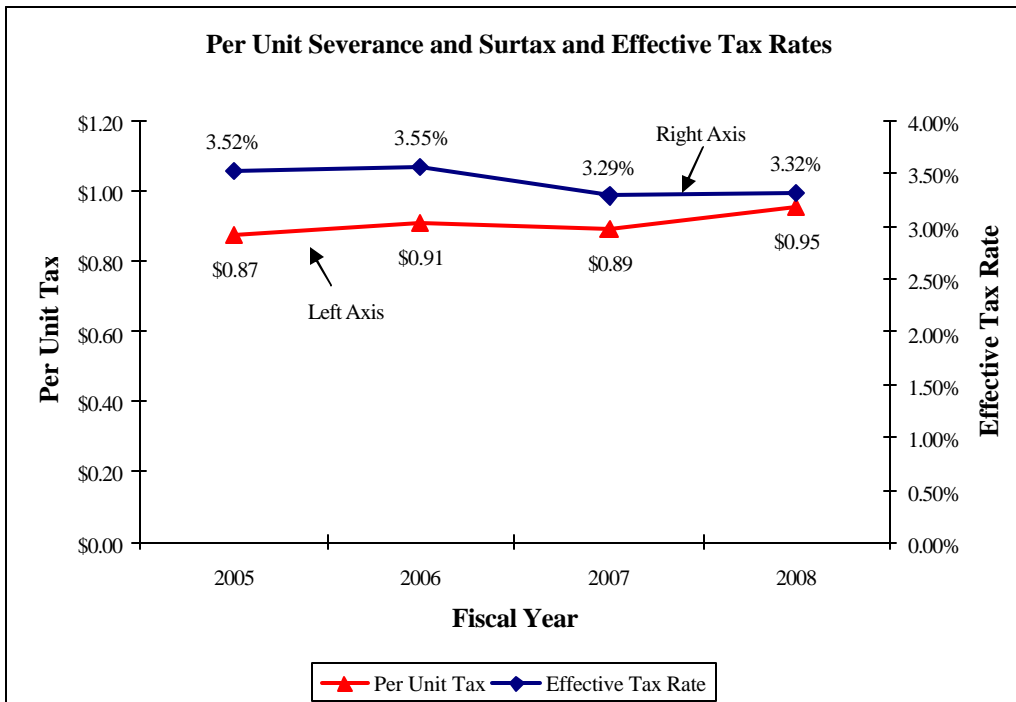
Coal Production, Prices, Revenues, Severance Taxes and Severance Surtaxes FY2005-2008

Production (000 short tons):	FY2005	FY2006	FY2007	FY2008
Total Sales Volume	26,555	26,567	25,592	22,801
Surface Mined Surtax Exempt	6,208	6,455	7,158	5,863
Surface Mined Surtax Non-Exempt	13,434	13,141	11,437	11,080
Underground Mined Surtax Exempt	6,913	6,971	6,997	5,858
Prices (\$/short ton):				
Weighted Average Price per Ton for all Coal	\$24.82	\$25.03	\$26.49	\$29.18
Surface Mined Surtax Exempt	\$20.75	\$20.39	\$21.86	\$25.06
Surface Mined Surtax Non-Exempt	\$23.16	\$23.59	\$25.59	\$25.40
Underground Mined Surtax Exempt	\$31.69	\$32.06	\$32.68	\$40.47
Sales Revenue (\$000):				
Total Sales Revenue	\$659,066	\$665,065	\$677,872	\$665,450
Surface Mined Surtax Exempt	\$128,803	\$131,634	\$156,474	\$146,946
Surface Mined Surtax Non-Exempt	\$311,178	\$309,943	\$292,727	\$281,397
Underground Mined Surtax Exempt	\$219,085	\$223,488	\$228,671	\$237,108
Taxes Collected and Intergovernmental Tax Credits (ITC) (\$000):				
Total Gross Severance Tax	\$14,998	\$15,004	\$14,447	\$12,880
Surface Mined Surtax Exempt	\$3,538	\$3,679	\$4,080	\$3,342
Surface Mined Surtax Non-Exempt	\$7,658	\$7,490	\$6,519	\$6,316
Underground Mined Surtax Exempt	\$3,802	\$3,834	\$3,848	\$3,222
Total Gross Severance Surtax	\$8,195	\$9,067	\$8,349	\$8,864
Surface Mined Surtax Exempt	\$0	\$0	\$0	\$0
Surface Mined Surtax Non-Exempt	\$8,195	\$9,067	\$8,349	\$8,864
Underground Mined Surtax Exempt	\$0	\$0	\$0	\$0
Total Gross Severance and Severance Surtax	\$23,193	\$24,071	\$22,797	\$21,744
Surface Mined Surtax Exempt	\$3,538	\$3,679	\$4,080	\$3,342
Surface Mined Surtax Non-Exempt	\$15,852	\$16,557	\$14,868	\$15,180
Underground Mined Surtax Exempt	\$3,802	\$3,834	\$3,848	\$3,222
Total ITC	\$5,702	\$5,886	\$5,479	\$4,534
Surface Mined Coal	\$5,702	\$5,886	\$5,479	\$4,534
Underground Mined Coal	\$0	\$0	\$0	\$0
Net Severance Tax and Severance Surtax Liability	\$17,491	\$18,185	\$17,318	\$17,210
Surface Mined Coal	\$13,689	\$14,351	\$13,469	\$13,988
Underground Mined Coal	\$3,802	\$3,834	\$3,848	\$3,222
Effective Tax Rates (Tax as percent of sales revenue):				
Gross Effective Severance Tax Rate for all Coal	2.28%	2.26%	2.13%	1.94%
Surface Mined Surtax Exempt	2.75%	2.80%	2.61%	2.27%
Surface Mined Surtax Non-Exempt	2.46%	2.42%	2.23%	2.24%
Underground Coal	1.74%	1.72%	1.68%	1.36%
Gross Effective Severance and Severance Surtax Rate for all Coal	3.52%	3.62%	3.36%	3.27%
Surface Mined Surtax Exempt	2.75%	2.80%	2.61%	2.27%
Surface Mined Surtax Non-Exempt	5.09%	5.34%	5.08%	5.39%
Underground Coal	1.74%	1.72%	1.68%	1.36%
Effective Tax Rate for all Coal (Net of ITC)	2.65%	2.73%	2.55%	2.59%
Surface Coal	3.11%	3.25%	3.00%	3.27%
Underground Coal	1.74%	1.72%	1.68%	1.36%
Tax per Ton of Coal (Tax divided by production):				
Gross Effective Severance Tax and Surtax per Ton for all Coal	\$0.87	\$0.91	\$0.89	\$0.95
Surface Mined Surtax Exempt	\$0.57	\$0.57	\$0.57	\$0.57
Surface Mined Surtax Non-Exempt	\$1.18	\$1.26	\$1.30	\$1.37
Underground Coal	\$0.55	\$0.55	\$0.55	\$0.55
Effective Tax per Ton for all Coal (Net of ITC)	\$0.66	\$0.68	\$0.68	\$0.75
Surface Coal	\$0.70	\$0.73	\$0.72	\$0.83
Underground Coal	\$0.55	\$0.55	\$0.55	\$0.55

Gross Severance Tax and Severance Surtax by Production Type FY2005-2008



Per Unit Severance Tax and Surtax and Effective Tax Rates FY2005-2008



- The following table reflects revenues losses from the surtax exemption from Fiscal Years 2005-2008 by type of mine
- Total losses in Fiscal Year 2008 were approximately \$9.2 million

Revenue Losses from Severance Surtax Exemption FY2005-2008

Fiscal Years 2005-2008				
Fiscal Year	2005	2006	2007	2008
Surface Mined Surtax Exempt (000 short tons)	6,208	6,455	7,158	5,863
Surface Surtax per Ton	\$0.63	\$0.69	\$0.73	\$0.80
Revenue Loss from Surtax Exempt Surface Production (\$000)	\$3,911	\$4,454	\$5,225	\$4,690
Underground Mined Surtax Exempt (000 short tons)	6,913	6,971	6,997	5,858
Underground Surtax per Ton	\$0.61	\$0.67	\$0.71	\$0.77
Revenue Loss from Surtax Exempt Underground Production (\$000)	\$4,217	\$4,670	\$4,968	\$4,511
Total Revenue Loss from Surtax Exemption (\$000)	\$8,128	\$9,125	\$10,193	\$9,201

- The following table reflects production and non-production taxes and effective tax rates
- In addition to production taxes, the State collects property tax on coal properties and gross receipts tax on the sale of coal
 - These taxes are generally imposed on properties and sales in the State and are not specific to coal
 - In FY2008, 94% of all coal produced in the State was subject to the gross receipts tax
 - Regular property taxes apply to coal properties; no ad valorem production or ad valorem production equipment taxes are collected on coal production

Total Taxes on Coal, Taxes per Short Ton and Effective Tax Rates, FY2008

Type of Tax	Tax Collected (\$000)	Tax per Ton	Effective Tax Rate
Production Taxes			
Severance Tax (Gross of ITC)	\$12,880	\$0.56	1.94%
Surtax (Gross of ITC)	\$8,864	\$0.39	1.33%
Resource Excise Tax	\$4,471	\$0.20	0.67%
Conservation Tax	\$1,133	\$0.05	0.17%
Total Production Taxes	\$27,348	\$1.20	4.11%
Non-Production General Taxes			
Property Tax	\$6,071	\$0.27	0.91%
Gross Receipts Tax	\$35,369	\$1.55	5.32%
Total Non-Production General Taxes	\$41,440	\$1.82	6.23%
All Taxes on Coal			
Total	\$68,788	\$3.02	10.34%

Environmental Impacts from Natural Resource Production

- There are environmental impacts associated with every stage in the production and consumption of all fossil fuels
 - Exploration
 - Production
 - Transportation for refining/processing
 - Refining/processing
 - Transportation for marketing
 - Combustion in vehicles or power plants
- One economic reason to tax the production and consumption of all fossil fuels is that they negatively impact air, water and soil quality
 - General effects are discussed in the full Report
 - Examples specific to New Mexico are also discussed in the full Report

Production and Non-Production Tax Rates on Coal, Oil and Natural Gas in New Mexico, FY2008

- The following table compares production tax rates on coal, oil and natural gas in New Mexico for Fiscal Year 2008
- Effective production tax rates for all coal are significantly lower than for oil and natural gas
- When effective production tax rates are broken down by type of coal, the rate on underground coal is significantly lower than for all other resources

Total Effective Tax Rates on Coal, Oil and Natural Gas, FY2008

Effective Production and Non-Production Tax Rates in FY2008					
Tax	Surface Coal	Underground Coal	All Coal	Oil	Natural Gas
Severance	2.25%	1.36%	1.94%	3.37%	3.02%
Severance Surtax	2.07%	0.00%	1.33%		
Resource Excise Tax	0.67%	0.67%	0.67%		
Conservation Tax	0.17%	0.17%	0.17%	0.17%	0.15%
Emergency School Tax				2.82%	3.20%
Ad Valorem Production Tax				1.04%	0.87%
Ad Valorem Production Equipment Tax				0.15%	0.15%
Total Effective Production Tax Rates	5.17%	2.20%	4.11%	7.55%	7.39%
Property Tax			0.91%		
Gross Receipts Tax			5.32%		
Total Effective Non-Production Tax Rates			6.23%		
Total Effective Tax Rates			10.34%	7.55%	7.39%

- The following table compares total effective production and non-production taxes per MMBTU, per short ton of carbon content and per short ton of CO₂ emissions for all coal, oil and natural gas
- Carbon content is highly correlated with heat value and CO₂ emissions
- Coal has the highest carbon content per unit of energy
 - Petroleum generally has about 25% less
 - Natural gas generally has about 45% less
- Coal is taxed at significantly lower rates than oil and gas per MMBTU, per short ton of carbon content and per short ton of CO₂ emissions

Total Effective Production and Non-Production Taxes per MMBTU, Unit of Carbon Content and CO₂ Emissions by Product, FY2008

Energy Resource	All Coal	Oil	Natural Gas
Tax per MMBTU	\$0.16	\$1.24	\$0.56
Tax per Short Ton of Carbon Content	\$5.60	\$64.35	\$35.23
Tax per Short Ton of CO ₂ Emissions	\$1.53	\$17.55	\$9.61

Interstate Comparison of Taxes on Coal Production

- The following table compares effective production, non-production and total tax rates for New Mexico and all other coal-producing states in the Western Region
- The two graphs following the table reflect New Mexico's rank among the other coal-producing states in the Western Region by effective production tax rates and total tax rates
- The table and graphs reflect the significance of the Gross Receipts Tax and sales taxes in other states

Interstate Comparison of Effective Production, Non-Production and Total Tax Rates in New Mexico and Other Western Coal-Producing States FY2008

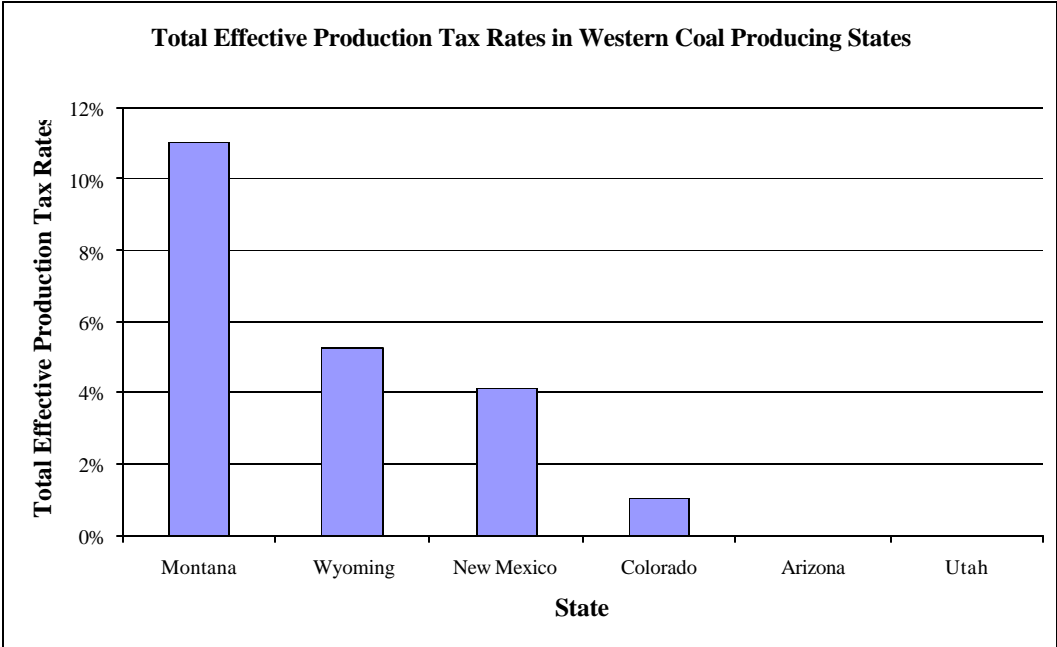
	Production Taxes					Other Taxes			Total Taxes
					Total Effective		Gross	Total	Total
State	Severance Tax	Severance Surtax	Resource Excise Tax	Conservation Tax	Production Tax Rate	Property Tax	Proceeds/ Receipts Tax	Effective Property and Sales Tax Rate	Effective Production and Non-Production Tax Rate
Montana	11.00%				11.00%		3.51%	3.51%	14.51%
Wyoming**	5.25%				5.25%	4.50%		4.50%	9.75%
New Mexico	1.94%	1.33%	0.67%	0.17%	4.11%	0.91%	5.32%	6.23%	10.34%
Colorado*	1.03%				1.03%	1.34%		1.34%	2.37%
Arizona					0.00%	0.62%	3.13%	3.74%	3.74%
Utah					0.00%	0.70%		0.70%	0.70%

*Up until December 2007, Colorado's severance tax rate had been frozen at \$0.54 per ton as a result of the Tabor Amendment. However, Colorado's Attorney General ruled that the Tabor Amendment did not apply to the severance tax. Effective January 2008, the rate increased to \$0.76 per ton. The data for FY2008 reflects actual prices from January – June 2008.

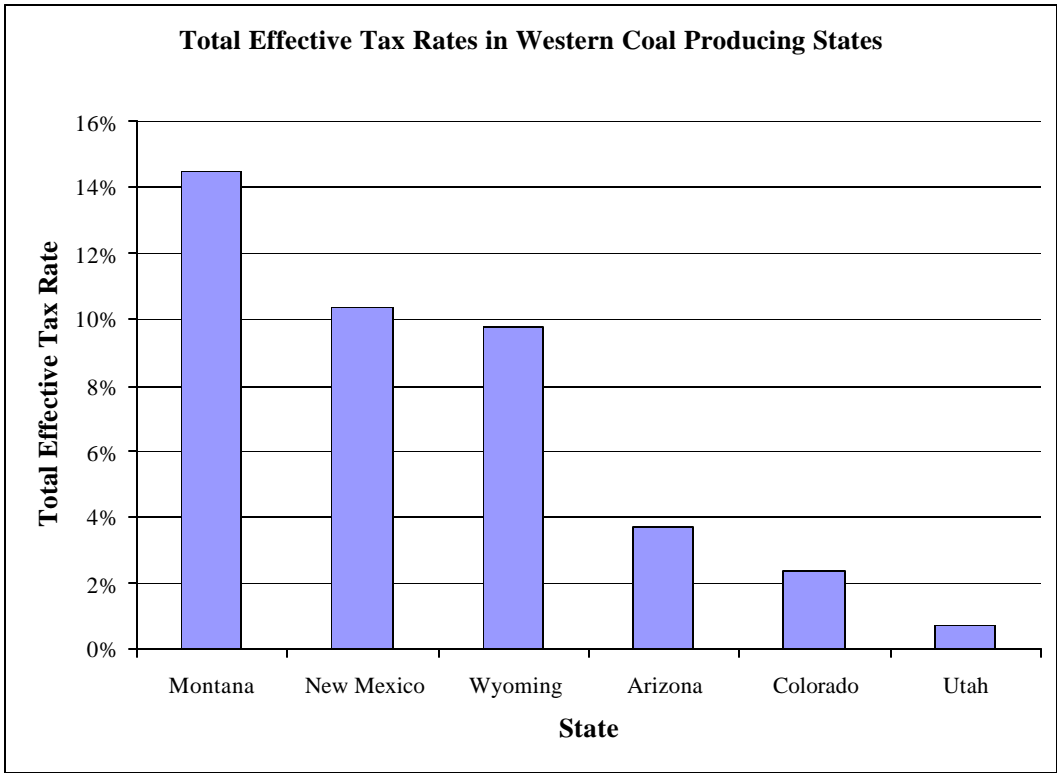
**The state of Wyoming will release no information regarding prices or taxes on its one underground mine.

For comparability purposes, calculations for the severance tax rates for the other five western coal-producing states were on a tax base equivalent to New Mexico's. The only deduction from the severance tax and severance surtax liability allowed in New Mexico is the ITC. Since the ITC represents taxes paid to other governmental agencies, the tax rates for New Mexico do not reflect the ITC deduction.

Effective Production Tax Rates in Western Coal Producing States, FY2008



Total Effective Production and Non-Production Tax Rates in Western Coal Producing States, FY2008



The Structure of Taxes on Oil and Natural Gas in New Mexico

- The following two tables reflect the current structure of taxes on oil and natural gas in New Mexico

Taxes on Oil	Net Price of Oil (\$/bbl)		
	Under \$15	\$15 to \$18	Over \$18
Oil and Gas Emergency School Tax	1.58% ^b	2.36% ^b	3.15%
Oil and Gas Severance Tax ^a	1.875% ^b	2.8125% ^b	3.75%
Subtotal	3.455%	5.1725%	6.90%
Oil and Gas Conservation Tax	0.19%	0.19%	0.19%
Production Ad Valorem Tax	1.04%	1.04%	1.04%
Production Equipment Ad Valorem Tax	0.14%	0.14%	0.14%
Total	4.825%	6.5425%	8.27%

^a Special rates not shown here apply when the average price for West Texas Intermediate (WTI) for the year ending on May 31 prior to the current fiscal year is less than \$24 (well workover projects; rate is 2.45%), or less than \$28 (enhanced oil recovery project; rate is 1.875%).

^b These rates apply to stripper wells, with prices based on the average taxable value in the calendar year preceding July 1 of the current fiscal year.

Taxes on Natural Gas	Net Price of Natural Gas (\$/mcf)		
	Under \$1.15	\$1.15 to \$1.35	Over \$1.35
Oil and Gas Emergency School Tax	2.00% ^b	3.00% ^b	4.00%
Oil and Gas Severance Tax ^a	1.875% ^b	2.8125% ^b	3.75%
Subtotal	3.875%	5.8125%	7.75%
Oil and Gas Conservation Tax	0.19%	0.19%	0.19%
Production Ad Valorem Tax	0.88%	0.88%	0.88%
Production Equipment Ad Valorem Tax	0.15%	0.15%	0.15%
Total	5.095%	7.0325%	8.97%

^a A special rate not shown here applies when the average price for West Texas Intermediate (WTI) for the year ending on May 31 prior to the current fiscal year is less than \$24 (well workover projects; rate is 2.45%).

^b These rates apply to stripper wells, with prices based on the average taxable value in the calendar year preceding July 1 of the current fiscal year.

Interstate Comparison of Taxes on Oil and Natural Gas

- The following table compares tax rates on oil and natural gas in the nine largest producing states in Fiscal Year 2007
 - Note that the tax rates shown in the following two tax tables are computed using the New Mexico tax base, which allows certain deductions, so the tax rates are higher than in the previous tables, which show effective tax rates (tax divided by total industry sales, before deductions)
 - New Mexico ranks right in the middle in terms of tax rates on oil
 - New Mexico ranks below the middle in terms of tax rates on natural gas
- The next table compares combined tax and royalty rates in the same nine largest producing states in Fiscal Year 2007
 - **These combined tax and royalty rates would apply only to production on state lands**
 - New Mexico ranks below all states except for Colorado
 - Up until December 2007, Colorado's severance tax rates had been frozen as a result of the Tabor Amendment
 - Colorado's Attorney General has ruled that the Tabor Amendment does not apply to severance taxes
 - Immediately following the Attorney General's ruling Colorado increased its severance tax rates on coal
 - Similar increases in severance tax rates on oil and gas are likely to follow suit if they have not already

State Tax and Royalty Rates and Production of Oil and Natural Gas in Top Producing States, Ranked by Tax Rate¹, FY2007

States (Ranked by Tax Rate)	Oil					
	Tax Rate	Royalty Rate	Combined Tax & Royalty Rate ²	Production		
				bbls (millions)	% U.S.	State Rank
Alaska	19.98%	20.00%	37.76%	22,517	14.1%	2
Louisiana	17.65%	23.75%	38.70%	6,345	4.0%	4
Wyoming	12.70%	16.67%	28.43%	4,615	2.9%	7
Kansas	8.92%	12.50%	21.17%	3,380	2.1%	8
New Mexico	8.27%	12.94%	20.94%	5,023	3.2%	6
Oklahoma	8.11%	20.00%	27.21%	5,288	3.3%	5
Texas	6.76%	25.00%	30.63%	32,821	20.6%	1
Colorado	5.50%	12.50%	17.85%	2,015	1.3%	9
California	1.06%	36.00%	36.75%	18,090	11.4%	3
	Natural Gas					
	Tax Rate	Royalty Rate	Combined Tax & Royalty Rate ²	Production		
				mcf (millions)	% U.S.	State Rank
Alaska	19.87%	20.00%	39.65%	445	2.3%	7
Wyoming	12.70%	16.67%	29.75%	1,816	9.4%	2
Kansas	11.86%	12.50%	25.33%	371	1.9%	8
Texas	11.03%	25.00%	35.23%	5,514	28.4%	1
Oklahoma	10.76%	20.00%	30.64%	1,689	8.7%	3
New Mexico	8.97%	13.07%	22.71%	1,609	8.3%	4
Colorado	5.50%	12.50%	18.45%	1,203	6.2%	6
Louisiana	4.45%	24.68%	28.82%	1,361	7.0%	5
California	1.75%	40.00%	41.30%	315	1.6%	9

¹ Tax rates for each state are on a taxable base equivalent to New Mexico's. They are either the rates that applied in FY07 if the information was available or that are expected to apply this year to the majority of oil or natural gas produced in the state and include property tax rates where applicable; some states have alternative rates that apply in certain circumstances. Royalty rates apply to production on state lands, and are averages reported for all production or for the most recently negotiated properties. New Mexico's rates are the weighted average rates in effect during FY07; Alaska's, Oklahoma's, and Wyoming's are the most recently negotiated rates; Louisiana's is the average bid in FY07; Kansas', Texas', and Colorado's rates are fixed rates in effect during FY07 and presently; California's are the weighted average rates for all leases presently in effect.

² Combined tax and royalty rates apply only to production on state lands and are calculated using the New Mexico tax base (assuming the royalty is the only deduction).

State Tax and Royalty Rates and Production of Oil and Natural Gas in Top Producing States, Ranked by Combined Tax and Royalty Rate¹, FY2007

States (Ranked by Combined Tax and Royalty Rate)	Oil					
	Tax Rate	Royalty Rate	Combined Tax & Royalty Rate ²	Production		
				bbbls (millions)	% U.S.	State Rank
Louisiana	17.65%	23.75%	38.70%	6,345	4.0%	4
Alaska	19.98%	20.00%	37.76%	22,517	14.1%	2
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Kansas	8.92%	12.50%	21.17%	3,380	2.1%	8
New Mexico	8.27%	12.94%	20.94%	5,023	3.2%	6
Colorado	5.50%	12.50%	17.85%	2,015	1.3%	9
	Natural Gas					
	Tax Rate	Royalty Rate	Combined Tax & Royalty Rate ²	Production		
				mcf (millions)	% U.S.	State Rank
California	1.75%	40.00%	41.30%	315	1.6%	9
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New Mexico	8.97%	13.07%	22.71%	1,609	8.3%	4
Colorado	5.50%	12.50%	18.45%	1,203	6.2%	6

¹ Tax rates for each state are on a taxable base equivalent to New Mexico's. They are either the rates that applied in FY07 if the information was available or that are expected to apply this year to the majority of oil or natural gas produced in the state and include property tax rates where applicable; some states have alternative rates that apply in certain circumstances. Royalty rates apply to production on state lands, and are averages reported for all production or for the most recently negotiated properties. New Mexico's rates are the weighted average rates in effect during FY07; Alaska's, Oklahoma's, and Wyoming's are the most recently negotiated rates; Louisiana's is the average bid in FY07; Kansas', Texas', and Colorado's rates are fixed rates in effect during FY07 and presently; California's are the weighted average rates for all leases presently in effect.

² Combined tax and royalty rates apply only to production on state lands and are calculated using the New Mexico tax base (assuming the royalty is the only deduction).